regions, respectively, each of the tapered regions diverging in the direction from its associated neck region to the medial region, the distal neck region being contiguous with the catheter tubing to define a distal interface; and

a distal fluid tight fusion bond along the interface of the catheter tubing and the distal neck region, said fusion bond being spaced apart from the distal tapered region by a distance of at most .030 inches, and wherein the distal tapered region is substantially free of crystallization.

27. The balloon catheter of claim 26 wherein:

the axial dimension of the distal fusion bond is at most .030 inches, and the distal fusion bond is spaced apart from the distal tapered region by less than .010 inches.

28. The balloon catheter of claim 26 wherein:

the catheter tubing and the balloon are formed of different polymeric materials.

29. The balloon catheter of claim 28 wherein:

the catheter tubing comprises an extrusion of at least one thermoplastic polymeric material chosen from the group consisting of: polyesters, polyolefins, polyamides, thermal polyurethanes and their copolymers.

30. The balloon catheter of claim 28 wherein:

the balloon is formed of at least one of the materials from the group consisting of: polyethylene terephthalate, nylon, polyolefin and their copolymers.

31. The balloon catheter of claim 26 further including:

a fluid tight proximal fusion bond between the catheter tubing and the proximal end region, said proximal fusion bond being axially spaced apart from the proximal tapered region by at most .030 inches, and wherein the proximal tapered region is substantially free of crystallization.

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